Atty. Docket No. 13303/4
PATENT APPLICATION

Application No.: 10/688,371

Amendment dated: October 13, 2005

Reply to Office Action dated: June 13, 2005

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings.

1-32 (Cancelled)

33. (Previously Presented): A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is a skeleton operator.

34-35 (Cancelled)

36. (Original) The method of claim 33, wherein at least one of the indices is a morphological

operator.

37. (Original) The method of claim 33, wherein at least one of the indices is mean pixel

intensity.

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38. (Original) The method of claim 33, wherein at least one of the indices is variance of

pixel intensity.

39. (Previously Presented) The method of claim 33, wherein at least one of the indices is a

frequency spectral analysis.

40. (Original) The method of claim 33, wherein at least one of the indices is fractal

dimension.

41. (Original) The method of claim 33, wherein at least one of the indices is a morphological

parameter.

42-84 (Cancelled)

85. (Previously Presented) A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

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morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is a morphological operator.

86-87 (Cancelled)

88. (Previously Presented) The method of claim 85, wherein at least one of the indices is

mean pixel intensity.

89. (Previously Presented) The method of claim 85, wherein at least one of the indices is

variance of pixel intensity.

90. (Previously Presented) The method of claim 85, wherein at least one of the indices is a

frequency spectral analysis.

91. (Previously Presented) The method of claim 85, wherein at least one of the indices is

fractal dimension.

92. (Previously Presented) The method of claim 85, wherein at least one of the indices is a

morphological parameter.

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93. (Previously Presented) A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is a mean pixel intensity.

94-96 (Cancelled)

97. (Previously Presented) The method of claim 93, wherein at least one of the indices is

variance of pixel intensity.

98. (Previously Presented) The method of claim 93, wherein at least one of the indices is a

frequency spectral analysis.

99. (Previously Presented) The method of claim 93, wherein at least one of the indices is

fractal dimension.

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100. (Previously Presented) The method of claim 93, wherein at least one of the indices is a

morphological parameter.

(Previously Presented) A method to derive quantitative information on bone structure 101.

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is variance of pixel intensity.

102-105 (Cancelled)

(Previously Presented) The method of claim 101, wherein at least one of the indices is a 106.

frequency spectral analysis.

(Previously Presented) The method of claim 101, wherein at least one of the indices is 107.

fractal dimension.

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108. (Previously Presented) The method of claim 101, wherein at least one of the indices is a

morphological parameter.

109. (Previously Presented) A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is frequency spectral analysis.

110-116 (Cancelled)

117. (Previously Presented) A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

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morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is fractal dimension.

118-122 (Cancelled)

123. (Previously Presented) The method of claim 117, wherein at least one of the indices is a

frequency spectral analysis.

124. (Previously Presented) The method of claim 117, wherein at least one of the indices is a

morphological parameter.

125. (Previously Presented) A method to derive quantitative information on bone structure

from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the

group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension,

morphological parameters and combinations thereof, thereby deriving quantitative information

on bone structure, wherein at least one of the indices is a morphological parameter.

126-130 (Cancelled)

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- 131. (Previously Presented) The method of claim 125, wherein at least one of the indices is a frequency spectral analysis.
- 132. (Previously Presented) The method of claim 125, wherein at least one of the indices is fractal dimension.
- 133. (New) The method of claim 109, wherein the frequency spectral analysis is a spatial frequency spectral analysis.